

BOOK REVIEWS

Interception Patrol by J.F. Elliott.

Charles C. Thomas, Publisher (301-327 East Lawrence Street, Springfield, Illinois 62703) 1973, 77 pp., hardcover-\$4.75.

The subtitle of this book is, "An Examination of the Theory of Random Patrol as a Municipal Police Tactic." The concept of random patrol, or unpredictability of patrol patterns, is an important **one**—and it is not new. In 1953 O.W. Wilson (1972) stated that a public impression of police omnipresence "... can be accomplished by conspicuous, *unpredictable* patrol" (emphasis added). Especially in motorized patrol, Wilson stated that "... the officer is able to change the direction of his travel frequently and to backtrack, thus providing a not-easily-predicted patrol." In a paper written in 1960 entitled "Random Patrol," R. Dean Smith (1964) argued that "if the beat officer becomes a predictable agent, then his effectiveness is impaired and he gives advantage to the enemy." We even hear stories of roulette wheels on police dashboards, used in an attempt to supplant readily acquired patrolling habits with unpredictable patrols **based on** statistical patterns of crimes. During the past six or seven years, several researchers have applied operations research concepts to the design and analysis of random patrols (Blumstein and Larson, 1967; Bottoms, Nilsson, and Olson, 1968; Rosenshine, 1970; Larson, 1972).

Elliott is to be commended for attempting to bring several aspects of the mathematical theory of random search to the patrol administrator who wishes to design random patrols in his day-to-day operating environment. However, the book has substantial technical and stylistic shortcomings that could confuse and even mislead the police administrator. Assertions are made throughout the book that appear to oversimplify the realities of patrol, and in the case of mathematical issues, appear to be incorrect in some instances. For example, Elliott summarily states that "... from a mathematical standpoint, the maximization of the effectiveness of the prevention, interception, or apprehension tactics are all the same problem. If one of these tactics is maximized all three will be." The contrary appears to be true to these reviewers. *Apprehension* tactics usually entail a rapid response to reports of crimes in progress, requiring perhaps a fixed pre-positioning of the patrol unit near the center of the unit's beat and virtually no preventive patrol. *Interception* requires unpredictable and often inconspicuous patrolling. *Prevention* might focus on maximizing the *perceived* threat of apprehension, and so requires such tactics as highly visible cars.

Words are misused in the text. **For example** "It is best **to patrol** in a random, rather than a continuous manner." Here "continuous" is meant to be "deterministic" or "predictable." Too, there are very few references to the literature other than Elliott's earlier papers and the

search theory results of "Koopman" who is in actuality Bernard O. Koopman (1956-57).

Elliott recognizes that a crucial parameter in determining police patrol effectiveness is ϕ , the detection probability of a patrolling car (given space-time coincidence of the car and an observable crime); and this probability may vary with the speed of the car. He is to be acknowledged for designing the first experiments to attempt to measure this parameter under simulated nighttime conditions. To estimate the on-scene detection probability, Elliott used a linear approximation to the exponential distribution to first calculate the probability of space-time coincidence, without, however, noting the limitations of the approximation. In fact the probability of space-time coincidence in the experiment could have ranged as high as .88 as calculated with the approximation—far above the justifiable range of the approximation. The result is that some of his calculations of ϕ could underestimate the true value by as much as 20%. Further, despite Elliott's own estimate that ϕ lies between .25 and .50, his calculations of manpower levels assume ϕ is unity.

Elliott, in his final chapter, proceeds to outline an algorithm for computer-designed patrol routes. Unfortunately, the algorithm is chosen without any accompanying explanation and is designed to produce continuous (deterministic) police patrols despite the author's own general principle that random patrol is best. In addition, the algorithm is based on a series of assumptions which oversimplify the problems involved. For example, the problems of nonhomogeneous distribution of crimes and nonhomogeneous distribution of patrol are given scant attention. Also, a linear approximation is again used to calculate the probability of interception. If the reader is willing to accept all these simplifications, he does not need any of the search theory results of Koopman because the problem of diminishing returns will not exist and the optimal solution will be to patrol only the block(s) with the highest crime level.

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Urban Justice: Law and Order in American Cities by Herbert Jacob.

Prentice-Hall, Inc. (Englewood Cliffs, New Jersey 07632), 1973, 145 pp., hardcover-\$6.95.

This new book provides a brief overview of the administration of justice in large American cities. The author focuses on some of the major elements of the criminal justice system with primary emphasis on the courts. Stress is on the urban phenomenon of justice with special reference to the relationship between city politics and the distribution of justice.

Of special interest is the author's treatment of the political impact on justice-a recurring theme throughout the book. This is particularly evident in his discussion of the influence of elites on the distribution of values by controlling the police, selecting judges, the passage of local ordinances, and the training of lawyers.

One limitation of the text is its minimal consideration of what constitutes crime and its discussion of the amount of crime. As a reviewer, I would have hoped for more recent discussion of criminal victimization studies.

A unique contribution of this writing is its review of the litigation and disposition of civil cases. The author refers to this as civil justice; it is, however, incongruous with the normal consideration of law and order in American cities.

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Cesare Beccaria and the Origins of Penal Reform by Marcello Maestro.

Temple University Press (Philadelphia, Pennsylvania 19122), 1973, 179 pp., hardcover-\$7.50.

In this time when so many layman and pseudo-experts have invaded the arena of penal reform to solemnly declare "new" ideas, which are in fact centuries old, Maestro's book on